

1.0 GENERAL

A Memorandum of Understanding has been promulgated between National Aeronautics and Space Administration (NASA, Requesting Agency) and the U.S. Office of Personnel Management (OPM, Performing Agency) to implement an interface between NASA and the OPM facility, Employee Express (EE). Employee Express allows current NASA employees, via an automated system, to access information about their personnel/payroll records and provides the ability to directly change the information which is within the employee's discretion. NASA has joined the Interagency Employee Express Task Force.

The NASA Personnel/Payroll System (NPPS) has been modified to implement with EE. The NPPS Interface Requirements Working Group was formed to define the interface requirements for NPPS. This group is composed of the NPPS Program Functional Manager, the NPPS Configuration Control Board members, the NPPS Engineering Review Board members, and others.

1.1 Purpose

The purpose of this Interface Control Document (ICD) is to specify the interfaces between EE and NPPS to the level of requirement and design, such that all changes required to implement the interface are known and all design issues are resolved. The ICD forms the baseline specification to be implemented by NPPS and EE. The ICD is attached to a NASA Form 1620, Change Control Request, and allocated to a future release of NPPS.

1.2 Scope

This interface is limited to the EE transactions implemented by the pilot version of the EE facility, defined by the following transactions:

- Federal Tax Withholding
- State Tax Withholding
- Direct Deposit Net Paycheck
- Direct Deposit Allotments
- Check Address
- Home Address Changes
- Federal Employee Health Benefits (FEHB)
- Thrift Savings Plan (TSP)

1.3 Employee Express System Overview

Characteristics of Employee Express:

- Empower Employees - Immediate Feedback
- Convenient - No need to get form (in most cases), or go to personnel or payroll office. Use any touch tone phone any time of day, or kiosks at strategic locations in the work area
- Two new employee actions have been added to the pilot 4 of 15 employee discretionary actions
- Reduce Processing Time and Effort
- Eliminates Layer of Activity
- Security and Privacy
- Increase the number of employees covered by adding more agencies to the EE network.

The Technology

- The touch tone phones and the touch screen kiosks handle the same transactions, in practically the same way.
- A touch tone phone is required if you want to telephone EE. A cellular phone cannot guarantee security and privacy.
- The phone system includes a combination of voice and touch tone technology.

Transactions

- Federal Taxes - IRS regulations require initial hard copy W-4 with each employer; therefore, federal tax data can only be changed, not initiated. If more than 10 exemptions are entered, EE does not allow the transaction; and a signed, paper copy W-4 form must be submitted to the payroll office.
- State Taxes - The capability is provided to change existing state tax data for all participating taxing states. Alabama, Missouri, and Mississippi are not currently participating.
- Net Check Deposit - Financial Institutions Routing Number and Account Number are required to perform this transaction. A net check deposit can be started, changed, or stopped.
- Allotments - Financial Institutions Routing Number and Account Number are required. No hard copy is necessary. An allotment can be started, changed, replaced, or stopped.

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

- Home Address - You can only make changes to home address information.
- Check Address - For some agencies, this address is mandatory if the net check deposit via EFT is stopped with an EE transaction (Net Check Deposit).
- FEHB - You can start, change, or stop health benefit options.
- TSP - You can start, change, stop, or allocate TSP contributions only during the TSP open seasons.

Security

- Each employee has a unique social security - personal identification number (PIN).
- PIN will be mailed to employee's home address.
- PIN number and data can be compromised on a cellular phone.

Assistance

- There are two forms of help desk support - Employee Express help desk and the Agency point of contact. The help desk can be accessed from the 800 number touch phone system from 7AM - 7PM eastern standard time. An Area Code 912 (Macon, Ga.) number is provided for access to the help desk during hours other than normal duty. Employees are not able to access the help desk via the 800 number.

1.4 NASA Personnel/Payroll System Overview

The NPPS is a uniform system used by all NASA installations. The system assists the installations in administering employee personnel and payroll processing and record keeping activities. The system user is able to accomplish data entry for required personnel action processing, view employee records, process payrolls, select on-line reports, and schedule copy reports.

The NPPS was developed as an agencywide software application to satisfy a core set of software requirements meeting the processing needs of all NASA installations. Each NASA installation may develop additional applications to interface with the NPPS database to satisfy specific processing needs of the installation.

NPPS is a sensitive data processing application requiring special attention to system and data access. The user is able to gain access to employee data through NPPS security. NPPS security is provided at the transaction/screen level for each user. The user can be authorized to view system data and can be separately authorized to update the data by a system administrator or authorized system user through the security administration function provided by NPPS.

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

The diversity of the NPPS user requires that a system navigation method be provided to satisfy both the beginning and the expert system user. NPPS menus provide one means of system navigation to the specific processing screens desired by the beginning system user. An "expert mode" provides an optional means of screen navigation for the more experienced system user to select a desired process and by-pass intermediate menu processing.

The diversity of the system user and the complex structure on NPPS requires that assistance be available to system users at all times. Help is available on-line to system users from any NPPS process. NPPS users can be authorized through the security administration function to maintain the help information at the installation.

The volume of input and output data required to be processed by NPPS necessitates that NPPS provides a method of processing bulk input and output. The system provides an on-line and batch access to the system database containing personnel and payroll data.

The on-line system is composed of three primary segments. The personnel segment of the system contains all the processing components required to add, maintain, and delete personnel in the system. The payroll segment of the system contains all the processing components required to process pay for active personnel. The application administration segment of the system contains the functions required to authorize system users to access system components, maintain system table values, update help information, and other miscellaneous functions requiring controlled user access.

Batch processes accommodate hardcopy output reports and input of large volumes of data to be processed by NPPS.

Standard external interfaces to other government agency systems must be accommodated in NPPS. Standard interface file formats defined by these agencies must be used for all data transfer between the agencies. NPPS provides output and input interface file formats for each standard interface application. Access to the NPPS database in read-only mode for center-unique applications is provided in the system through the use of standard ADABAS and NATURAL programs developed by each installation. NPPS provides a method to exit a NPPS process, execute an installation-unique application, and return to NPPS for further processing.

2.0 Interface Requirements and Design

This section specifies the operational scenario and technical process requirements, and the design necessary to implement the requirements for the EE - NASA interfaces and the interfaces and processes internal to NASA (NPPS) that are also required to implement the EE - NASA interfaces.

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10/15/96 RLSE 5.2.1

2.1 Bi-Weekly Master File Extract Processing

The EE facility requires an extract of data from the NASA employee files supporting NASA's personnel and payroll processing. These files provide the EE database accessed by NASA employees when interfacing with the EE telephone and/or kiosk. The initial, full-production extract contains all of the EE data available on the NASA files. Subsequent extracts contains only data that has changed since the last extract, as specified below, including new and separated employee information

2.1.1 Bi-Weekly Extract Format Requirements

A flat file containing the fields described below is required to be produced from the NPPS files each pay period after the close of the payroll processing to form the initial EE production extract. Changes to the fields are produced for each pay period subsequent to the initial production submission.

2.1.1.1 Employee Express Extract Interface Requirements

FIELD NAME	LENGTH	POSITION
Social Security Number	9	1-9
Home Street	35	10-44
Home Street2	35	45-79
Home Street3	25	80-104
Home City Code	4	105-108
Home City	23	109-131
Home County Code	3	132-134
Home State	4	135-138
Home Zip	11	139-149
Check Street	35	150-184
Check Street2	35	185-219
Check City Code	4	220-223
Check City	16	224-239
Check State	4	240-243

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

Check Zip	11	244-254
Fed Marital Status	1	255
Fed Exemptions	2	256-257
Fed Deduction Amount	6	258-263
State Residence Code	4	264-267
State Marital Status	1	268
State Exemption	2	269-270
State Variance	5	271-275
State Deduction Amount	6	276-281
Direct Deposit Bank Routing Code	9	282-290
Direct Deposit Account Type	1	291
Direct Deposit Account Number	17	292-308
Financial Allotment Bank Routing Code (1)	9	309-317
Financial Allotment Account Type (1)	1	318
Financial Allotment Account Number (1)	17	319-335
Financial Allotment Deduction Amount (1)	7	336-342
Financial Allotment Bank Routing Code (2)	9	343-351
Financial Allotment Account Type (2)	1	352
Financial Allotment Account Number (2)	17	353-369
Financial Allotment Deduction Amount (2)	7	370-376
Financial Allotment Bank Routing Code (3)	9	377-385
Financial Allotment Account Type (3)	1	386
Financial Allotment Account Number (3)	17	387-403
Financial Allotment Deduction Amount (3)	7	404-410
Employee Last Name, First Name, Middle Initial, Suffix (Display as received)	41	411-451
FEHB Eligibility Code	1	452
Sex Code	1	453

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

FEHB Present Enrollment Code	3	454-456
TSP Eligibility Code	1	457
TSP Percent	2	458-459
TSP Amount	4	460-463
G Fund	3	464-466
F Fund	3	467-469
C Fund	3	470-472
TSP Retirement Coverage	1	473
Date of Birth	6	474-479
CPDF Agency Code	4	480-483
Personnel Office Id	8	484-491
Payroll Office Number	8	492-499
Ending Pay Period Date *	6	500-505
Pay Period Number *	2	506-507
Agency ID	11	508-518
Routing Code	2	519-520
File ID	6	521-526
Processing ID	10	527-536
Record Type	1	537
Filler	23	538-560

* The ending pay period date and pay period number denote the pay period for which the employee master record is current.

These requirements are a result of the Security/Interface work group and it's goal to decrease the amount of data transferred and transfer times.

General Information

No dual appointments are accepted in EE. There should be a message in the system stating this to the employees. Each agency system is responsible for taking out all duplicate SSNs.

Agency systems should only send new, changed, or deleted records in the bi-weekly update master record extract file. Currently agency systems are sending change records. The records should contain all fields and be full record replacements.

The master file extract includes a 1 character field labeled "RECORD TYPE" with the following values:

A = Accession (new record to be added)

C = Change (any data element except SSN is changed in the record)

S = Separation (record that should be removed from the master file)

The master file extract includes a 6 character field labeled "FILE ID" with the following values:

NAS000 = All National Aeronautics and Space Administration records

The field labeled "AGENCY ID" data is left justified, padded right with spaces.

The master file extract includes a 10 character field labeled "PROCESSING ID". This field is needed for HHS to move their current agency id values into this field for processing. Other agencies can use this field for their own internal processing uses. NASA does not use this field.

Macon processes records in the following sort order:

SSN (primary sort)

RECORD TYPE (secondary sort by:)

Separation

Accession

Change

If 50 errors (described below) occur, OPM does not process the file but notifies the agency systems personnel for a new file or full master file replacement. The following are error resolutions and tracking:

If RECORD TYPE = S and SSN is not found on EE master file, OPM does not process the record but writes to an error file for tracking and notifying agency systems personnel.

If RECORD TYPE = S and SSN is found but AGENCY ID in record does not equal AGENCY ID in EE master file, OPM does not process the record but writes to an error file for tracking and notifying agency systems personnel; for hash totals OPM subtracts out the numerics for the record in OPM's file.

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

If RECORD TYPE = A and SSN is found, if AGENCY ID in record does not equal AGENCY ID in EE master file, OPM processes (overlay the existing record) but will not generate a new PIN; OPM notifies the agency systems personnel.

If RECORD TYPE = A and SSN is found, if AGENCY ID in record is equal to AGENCY ID in EE master file, OPM does not process the record but writes to an error file for tracking and notifying agency systems personnel; for hash totals OPM subtracts out the numerics for the record in OPM's file and adds in the numerics for the record in the agency file.

If RECORD TYPE = C and SSN is not found, OPM writes to an error file for tracking and notifies agency systems personnel; for hash totals OPM adds in the numerics for the record in the agency file.

Hash total information for the header and trailer continue to reflect information about the current file being transferred (the update file, not full master file for EE).

Header and Trailer Information

The batch header is the first record in the file and the batch trailer is the last record in the file. The header and trailer records are 80 bytes in length.

Update Master Extract File:

BATCHbHEADERbFORbXX.bbRECORDS:b#####.bCARDS:b#####.bHASHb
TOTALS:b#####

BATCHbTRAILbbFORbXX.bbRECORDS:b#####.bCARDS:b#####.bHASHbT
OTALS:b#####

XX -	Routing code that identifies the agency NASA=07
RECORDS -	Total number of records in the file
CARDS -	Total number of card images (80 byte records) for RJE
transmissions	
HASH TOTALS -	Total of all extract Federal Deduction Amounts for all records in the file
b -	Denotes a space in the record

If the agency has no accessions, changes, or separations, an update master extract file is still created. The batch header and trailer records would contain zero counts for RECORDS, CARDS, and HASH TOTALS. The second record in the file is in the master record format with data only in the Ending Pay Period Date and Pay Period Number fields. This data is used to update the master records in EE and to ensure that OPM is

receiving current information and providing the current date information to the employee.

Add hash total information as the next to last record in the file (the record(s) before the batch trailer record) to verify the contents of the file are processing correctly and the master file is updated properly. For files that contain records for more than one FILE ID, there is a separate Master Hash record for each FILE ID. Hashing occurs after changes have been applied to the full master file. The records are 80 bytes in length and contain the following information:

COUNT:b#####MASTERbHASHbFORbFILEID:b#####bbbbbbbbbb
bbbbbbbbbbbbbbbbbb

COUNT -	Total number of employees in full master file for EE
MASTER HASH -	Total of all 9 digits of the social security number in full master file for EE (all integers)
FILE ID -	Identifies what file the records are for (Ex: NAS000)
b -	Denotes a space in the record

COUNT and MASTER HASH are padded on the left with leading zeroes.

If the agency has no accessions, change, or separations, the agency system still creates a MASTER HASH for each FILE ID.

After applying the reconciliation rules (page 11) for any errors, if hash totals do not equal, OPM does not process the file but notifies the agency systems personnel and receives a full master file replacement through telecommunications or overnight tape. OPM compares the current master file against the new master file and creates a "change file" to update the touch screen systems.

OPM notifies the agency systems personnel via a fax indicating a problem has occurred. The fax is generated by the system at the time the error occurs. Each agency system provides OPM with contact names, fax, and voice numbers. OPM establishes a new file area on the FJOB bulletin board in the EE conference with access by agency systems personnel only. When an error has occurred and a fax has been sent, OPM creates a file with the information about the record(s) OPM has on file, record(s) received by the agency, and what error has occurred. This satisfies security concerns of faxing SSNs and employee data.

2.1.1.2 NPPS Field Required to Create the Extract

Appendix A, Data Cross Reference contains a cross reference of NPPS files to EE files. The spreadsheet contains field name, format, and formula for each of the fields needed by EE in the following files:

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

NPPS PAY/PER/MER Master Files
Employee Express Bi-Weekly Extract file to OPM
Employee Express Daily Extract file from OPM
Employee Express Master
NPPS PAY/PER Suspense Files

Also contained in Appendix A, Data Cross Reference are edits, questions, and comments pertaining to the issues.

In Appendix A, Data Cross Reference the fields are defined which must be extracted from the NPPS files to produce the EE bi-weekly data file at each NASA installation. The length of the NPPS field is not necessarily the stored length, but may represent the maximum number of bytes that is allowed in the NPPS transaction. For example, the database field for the Federal Additional Deduction Amount (Federal Deduction Amount in EE) is defined as 8.2 in the ADABAS definition, but only 3 bytes are allowed to be entered in the NPPS FTAX transaction. Thus, the EE transaction must mirror the NPPS transaction.

2.1.2 NASA (NPPS) Design Requirements

The EE interface is optimized if a single file is passed from NASA to OPM/Macon for the weekly extract. This can be accomplished if each NASA installation produces an extract from the NPPS files processed normally by the installation and the lead NASA installation consolidates the individual files and creates a single bi-weekly extract file for the agency. This approach saves OPM the expense of developing multiple point-to-point interfaces to collect the extracts and operating each of those processes on a bi-weekly cycle. The NASA interfaces to collect the individual files for consolidation is standardized by using the Network Data Mover (NDM). Also, any future operational consolidations (e.g. payroll processing by one or two NASA installations) implemented by NASA would not impact the EE interface.

2.1.2.1 NPPS Master File Requirements

Each NASA installation requires processing to create and maintain a bi-weekly file of EE data, as defined in 2.1.1.1 and 2.1.1.2. A new ADABAS file has been created to store the bi-weekly employee data in order to facilitate the processing of change-only data being extracted/sent to EE.

FIELD NAME	LENGTH	POSITION
Social Security Number	9	1-9
Home Street	35	10-44
Home Street2	35	45-79
Home City	23	80-102

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

Home State	4	103-106
Home Zip	11	107-117
Check Street	35	118-152
Check Street2	35	153-187
Check City	16	188-203
Check State	4	204-207
Check Zip	11	208-218
Fed Marital Status	1	219
Fed Exemptions	2	220-221
Fed Deduction Amount	6	222-227
State Residence Code	4	228-231
State Marital Status	1	232
State Exemption	2	233-234
State Variance	5	235-239
State Deduction Amount	6	240-245
Direct Deposit Bank Routing Code	9	246-254
Direct Deposit Account Type	1	255
Direct Deposit Account Number	17	256-272
Financial Allotment Bank Routing Code (1)	9	273-281
Financial Allotment Account Type (1)	1	282
Financial Allotment Account Number (1)	17	283-299
Financial Allotment Deduction Amount (1)	7	300-306
Financial Allotment Bank Routing Code (2)	9	307-315
Financial Allotment Account Type (2)	1	316
Financial Allotment Account Number (2)	17	317-333
Financial Allotment Deduction Amount (2)	7	334-340
Employee Name (Last, First, Middle I)	41	341-381
FEHB Eligibility Code	1	382
Sex	1	383
FEHB Present Enrollment Code	3	384-386
TSP Eligibility Code	1	387
TSP Percent	2	388-389
TSP Amount	4	390-393
G Fund	3	394-396
F Fund	3	397-399
C Fund	3	400-402
TSP Retirement Coverage	1	403
Date of Birth (MMDDCCYY)	8	404-411
CPDF Agency Code	4	412-415
Personnel Office ID	8	416-423
Payroll Office Number	8	424-431
Ending Pay Period Date	6	432-437
Pay Period Number	2	438-439

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

Agency ID	11	440-450
Routing Code	2	451-452
File ID	6	453-458
Processing ID	10	459-468
Record Type	1	469

2.1.2.2 NPPS Master File Processing

Bi-Weekly Initialization of the EE-MASTER File This process initializes the record type fields to blank and deletes all 'S' type (terminations/deletions) records.

Update the EE-MASTER File This process updates the EE-MASTER from the NPPS master files used in the normal bi-weekly personnel and payroll processes. Active (Reactivation Code = 0), new employees (New Employee Indicator = 'Y') and terminating employees (Reactivation Code = 0 and Duty Status = 'Z') is analyzed. New employees have a new record written to the EE-MASTER with a value of 'A' posted to their Record Type and terminating employees have an 'S' posted to their Record Type on the EE-MASTER. Other active employees whose data on the NPPS master files shows a value different than that on the EE-MASTER have the differences extracted and posted to the EE-MASTER and a value of 'C' posted to their Record Type.

When the process detects a terminating NOAC of 721T (inter-agency transfer), the termination is not communicated to EE. However, the record is deleted by the bi-weekly initialization process. When the process detects a NOAC of 721A, all the data is written to the EE-MASTER with a value of 'C' posted to their Record Type.

When an employee SSN change is detected, an 'S' is posted to their Record Type on the EE-MASTER (the old SSN). In addition, a new EE-MASTER record is written using the new SSN with a value of 'A' posted to their Record Type.

Create Bi-weekly Extract File This process reads the EE-MASTER file and creates the flat file and the header and trailer records specified in 2.1.1.1 and 2.1.1.2, above. If the Record Type fields are all blank, this process loads all 9s to create a dummy record.

Transmit Bi-Weekly Extract File JCL is processed to transmit the bi-weekly extract file to the lead center. This process has the capability to automatically restart if the transmission is unsuccessful. In addition, processing is required to 'NDM' the file to the NASA center responsible for consolidating all NASA extracts into the NASA file which EE retrieves for processing the next pay period's employee transactions. This is the first step of the bi-weekly extract file creation. **Figure 2.1.2.2-1** depicts the processes required to create each NASA center bi-weekly extract.

2.1.2.3 NPPS Consolidation of NASA Installation Extracts

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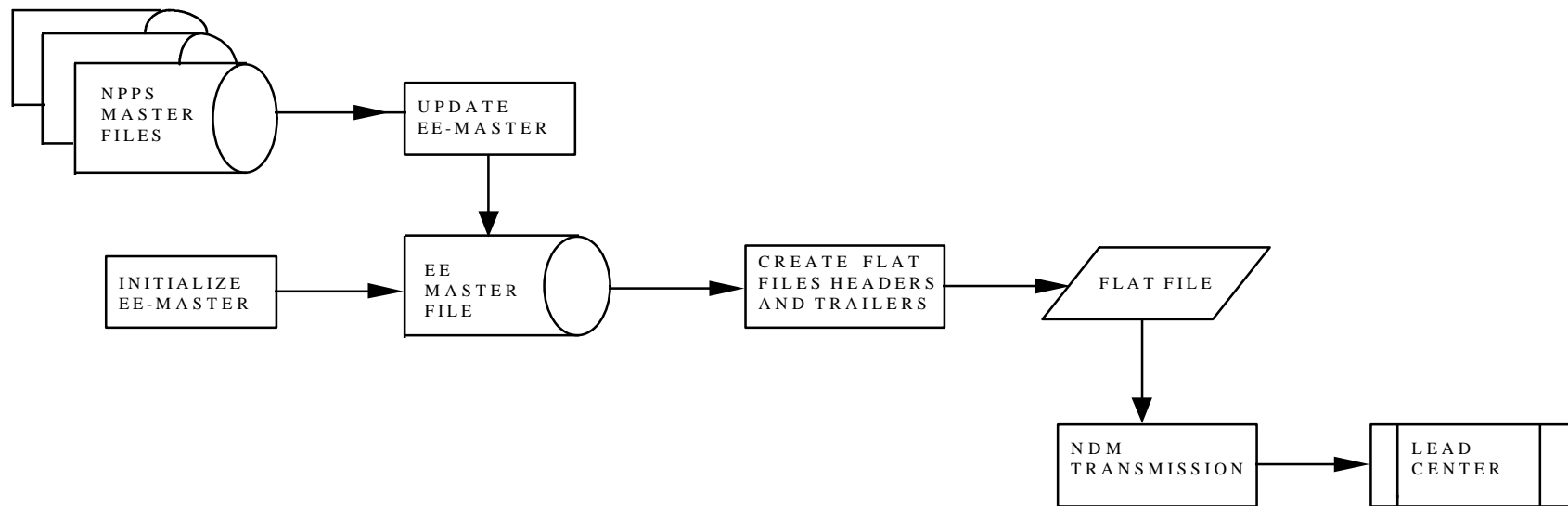
10/15/96 RLSE 5.2.1

The lead NASA center has additional processes that are required to collect and consolidate the weekly extract files from all the individual NASA centers and prepare them for pick-up by the EE facility in Macon, Georgia. **Figure 2.1.2.3-1** depicts these processes. The following processing is required:

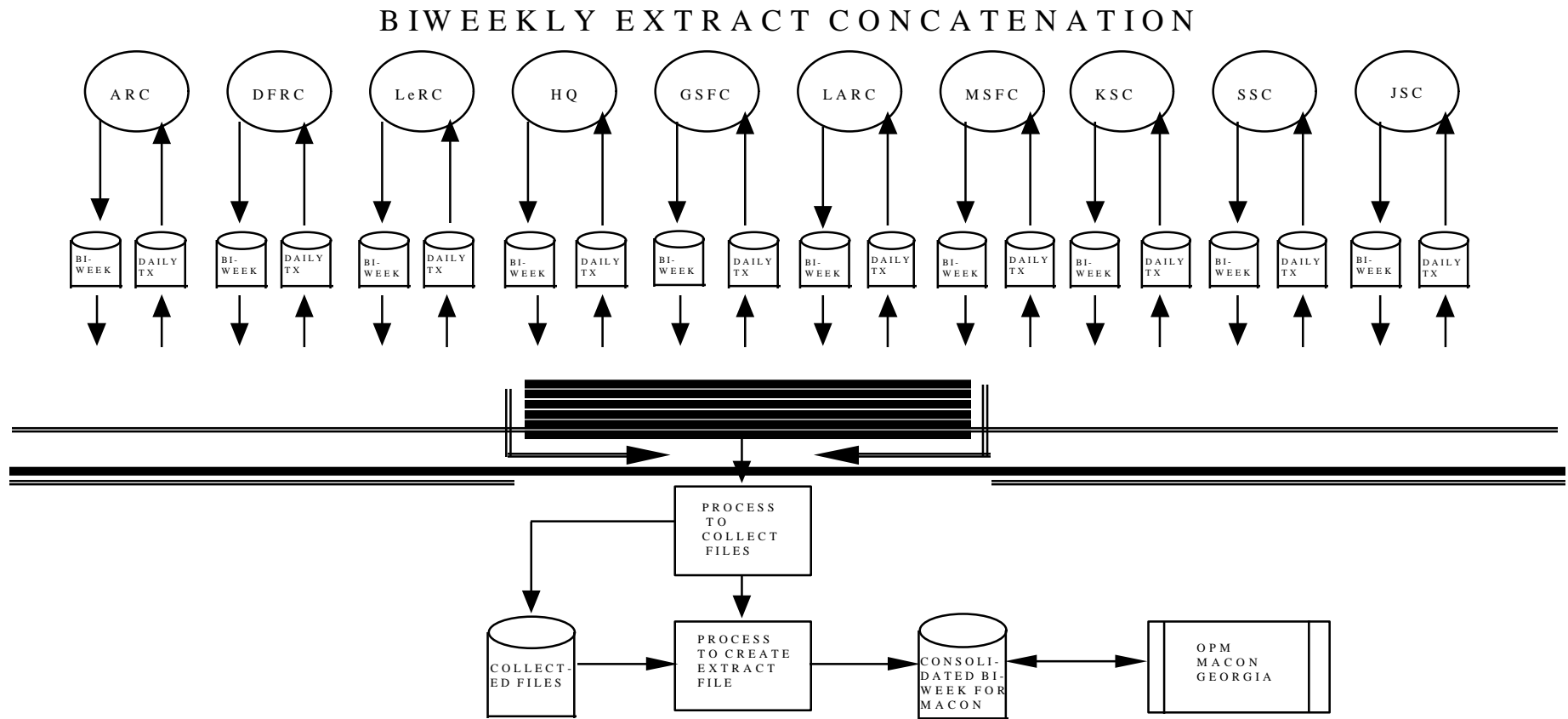
Collect Individual Bi-Weekly Files This process collects the bi-weekly extract files sent from other NASA centers as they arrive at the consolidating center. This process continues to initiate until all NASA centers that are required to send biweekly extracts have done so. The NPPS Batch Job Scheduler contains the status of this process as it collects the extract files.

Create the NASABi-Weekly Extract File This process consolidates all the center bi-weekly extract files into one, combine the headers and trailers and, create the NASABiWeekly extract file for pick-up by the EE facility. In addition, processing is required to 'NDM' the file to the NASA center responsible for consolidation of all NASA extracts into the NASA file which EE retrieves for processing the next pay period's employee transactions.

NPPS/EMPLOYEE EXPRESS INTERFACE BI-WEEKLY EXTRACT

**FIGURE 2.1.2.2-1**

BIWKLYEX.PPT



OVDLYTX.PPT

FIGURE 2.1.2.3-1

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

2.2 Daily Transaction File Processing

The EE facility in Macon, Georgia collects all transactions received via phone and kiosk from NASA employees each day. These are consolidated into one transaction file and transmitted to the NASA consolidating center each day, Monday through Friday. If for that day no transactions have been entered by NASA employees, Macon sends a null transaction (all 9s).

2.2.1 Employee Express Daily Transaction File Interface Requirements

Header and Trailer Information

The batch header is the first record in the file and the batch trailer is the last record in the file. The header and trailer records are 80 bytes in length.

Transaction File:

BATCHbHEADERbFORbXX.bbRECORDS:b#####.bCARDS:b#####.bHASHb
TOTALS:b#####

BATCHbTRAILbbFORbXX.bbRECORDS:b#####.bCARDS:b#####.bHASHbT
OTALS:b#####

XX -	Routing code that identifies the agency NASA=07
RECORDS -	Total number of records in the file
CARDS - transmissions	Total number of card images (80 byte records) for RJE
HASH TOTALS -	Total of all transaction codes for all records in the file
b -	Denotes a space in the record

The following transactions in the exact format presented are transmitted if input by NASA employees to EE.

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

Transaction File for all Actions.

FIELD NAME	LENGTH	POSITION
Transaction Code	4	1-4
Social Security Number	9	5-13
Effective Date	6	14-19
Agency ID	11	20-30
Routing Code	2	31-32
Name Check	3	33-35
Phone/Kiosk Indicator	1	36
Kiosk Number	4	37-40
Date of Action	6	41-46
Time of Action	6	47-52

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

If Transaction Code = 0012 (Home Address Change)

FIELD NAME	LENGTH	POSITION
Street	35	53-87
Street2	35	88-122
Street3	25	123-147
City Code	4	148-151
City	23	152-174
County Code	3	175-177
State	4	178-181
Zip	11	182-192
Filler	278	193-470
Processing ID	10	471-480

If Transaction Code = 0022 (Check Mail Address Change)

FIELD NAME	LENGTH	POSITION
Street	35	53-87
Street2	35	88-122
City Code	4	123-126
City	16	127-142
State	4	143-146
Zip	11	147-157
Filler	313	158-470
Processing ID	10	471-480

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

If Transaction Code = 0051 (Direct Deposit Start)
 0052 (Direct Deposit Change)
 0053 (Direct Deposit Stop)

FIELD NAME	LENGTH	POSITION
Bank Routing Code	9	53-61
Account Type	1	62
Account Number	17	63-79
Filler	391	80-470
Processing ID	10	471-480

If Transaction Code = 0061 (Start Financial Allotment)
 0062 (Change Financial Allotment)
 0063 (Stop Financial Allotment)

FIELD NAME	LENGTH	POSITION
Bank Routing Code	9	53-61
Account Type	1	62
Account Number	17	63-79
Deduction Amount	7	80-86
Filler	384	87-470
Processing ID	10	471-480

If Transaction Code = 0032 (Federal Tax Change)

FIELD NAME	LENGTH	POSITION
Marital Status	1	53
Exemptions	2	54-55
Deduction Amount	6	56-61
Filler	409	62-470
Processing ID	10	471-480

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

If Transaction Code = 0042 (State Tax Change)

FIELD NAME	LENGTH	POSITION
Residence Code	4	53-56
Marital Status	1	57
Exemptions	2	58-59
Variance	5	60-64
Deduction Amount	6	65-70
Filler	400	71-470
Processing ID	10	471-480

If Transaction Code = 0072 TSP Start/Change
 = 0073 TSP Stop

FIELD NAME	LENGTH	POSITION
TSP Percent	2	53-54
TSP Amount	4	55-58
G Fund	3	59-61
F Fund	3	62-64
C Fund	3	65-67
TSP Effective Date	6	68-73
TSP New Eligibility Date	6	74-79
TSP Allocation Date	6	80-85
Filler	385	86-470
Processing ID	10	471-480

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

If Transaction Code = 0081 FEHB Start
 = 0082 FEHB Change
 = 0083 FEHB Stop

FIELD NAME	LENGTH	POSITION
FEHB Enrollment Code	3	53-55
FEHB Effective Date	6	56-61
FEHB Marriage Indicator (Y,N)	1	62
FEHB Daytime Phone	10	63-72
FEHB Family Member Name 1	35	73-107
FEHB Family Zip Code 1	11	108-118
FEHB Family DOB 1 (MMDDYY)	6	119-124
FEHB Family Sex Code 1 (M,F)	1	125
FEHB Family Relationship 1 (1,2,3,4)	1	126
FEHB Family SSN 1	9	127-135
FEHB Family Member Name 2	35	136-170
FEHB Family Zip Code 2	11	171-181
FEHB Family DOB 2	6	182-187
FEHB Family Sex Code 2	1	188
FEHB Family Relationship 2	1	189
FEHB Family SSN 2	9	190-198
FEHB Family Member Name 3	35	199-233
FEHB Family Zip Code 3	11	234-244

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

FEHB Family DOB 3	6	245-250
FEHB Family Sex Code 3	1	251
FEHB Family Relationship 3	1	252
FEHB Family SSN 3	9	253-261
FEHB Family Member Name 4	35	262-296
FEHB Family Zip Code 4	11	297-307
FEHB Family DOB 4	6	308-313
FEHB Family Sex Code 4	1	314
FEHB Family Relationship 4	1	315
FEHB Family SSN 4	9	316-324
FEHB Family Member Name 5	35	325-359
FEHB Family Zip Code 5	11	360-370
FEHB Family DOB 5	6	371-376
FEHB Family Sex Code 5	1	377
FEHB Family Relationship 5	1	378
FEHB Family SSN 5	9	379-387
FEHB Other Insurance Indicator	1	388
FEHB Medicare Indicator	1	389
FEHB Medicare-A	1	390
FEHB Medicare-B	1	391
FEHB Champus Indicator	1	392

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

FEHB Other Insurance Name	35	393-427
FEHB Event Code	2	428-429
FEHB Event Date	6	430-435
Filler	35	436-470
Processing ID	10	471-480

General Interface Requirements for State Tax

To handle records of employees who have filed exempt from State Tax through agency systems: The master file extract record (generated by the agency system) for such an employee contains an 'X' in Marital Status, and zeroes in the Exemption and Additional Withholding fields. When the record is displayed/spoken in EE, the system tells the user that their current status is Exempt from State Tax. The employee may change the exemption status by completing/changing any of the fields. The EE transaction file passes back to the agencies these changes along with whatever was in the extract record for those fields the employee does not change and the agency systems must assure any such data does not cause the action to reject in the agency system.

When an agency has an employee withholding state tax for a state that is not participating in EE, the extract data must contain the State Residence Code of the state, but all other state tax fields should be null-filled.

2.2.2 NASA (NPPS) Design Requirements

The EE facility sends a daily transaction file in the format specified above to the NASA consolidating center for redistribution to all NASA centers participating in the EE interface. The NASA consolidating center provides the capabilities specified in the following paragraphs.

2.2.2.1 NPPS Daily Update from Employee Express Transaction File

Each NASA center requires processing to extract the transactions applicable to its employees and to post those transactions to the appropriate NPPS suspense file (NPS2-PAY-SUSPENSE or NPS2-PER-SUSPENSE). Timing the maturing of the EE transactions is at the option of each NASA center. The NPPS batch mature jobs (NA00001 and NE00008) can be initiated from the EE daily update process or they can be scheduled manually, depending on local requirements. **Figure 2.2.2.1-1** depicts the processes required for the daily update of EE transactions at each NASA center. The processing requirements are as follows:

Receive the Daily Transaction File This process looks for a current transaction file each day. When a current file is found (data set not empty), the hash counts are verified and an appropriate action is taken based on the results (unequal hash counts produce an error message).

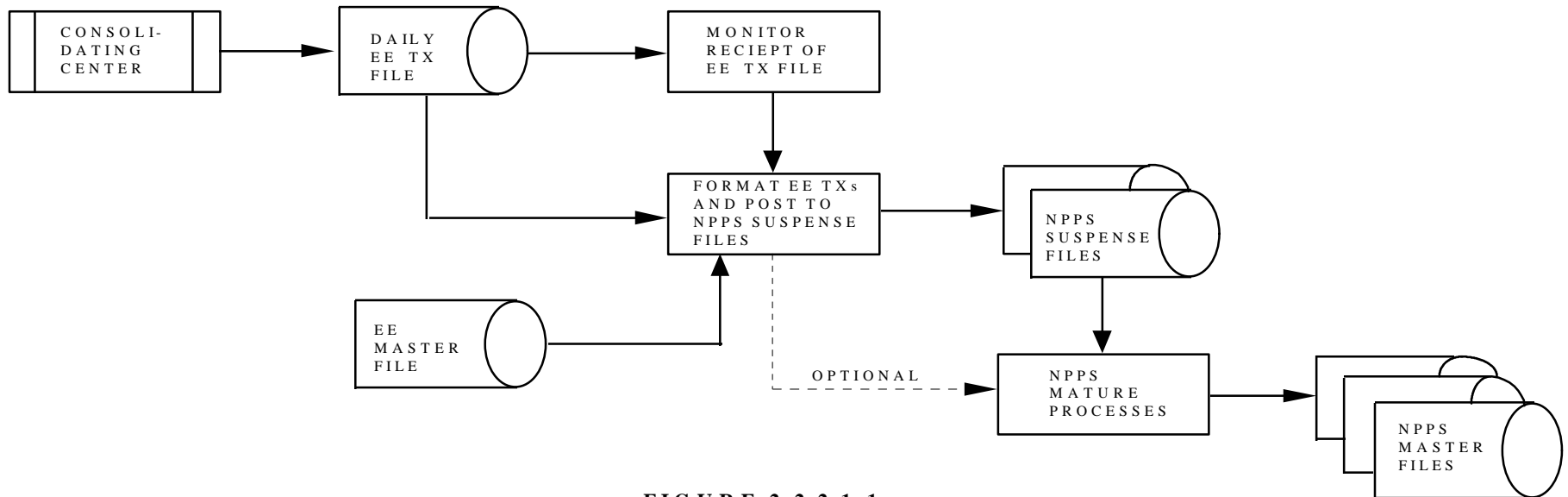
Apply the Daily Transactions This process converts the EE transactions to the appropriate NPPS suspense file format and posts the transactions to the corresponding NPPS suspense file. If the EE transaction file is empty, a message so stating is posted to the NPPS batch job log. The process does not process a transaction for which a matching active or terminating employee is not found on the NPPS master files. Refer to Appendix B, Reports, to view the EE Transactions Report received from OPM.

2.2.2.2 NPPS Single Point Receipt and Distribution

The NASA consolidating center receives the daily EE transaction file from the Macon facility and distributes copies to the participating NASA centers. **Figure 22.2.2-1** depicts the processes required for these interfaces. The following processing is required:

Receive the Daily Transaction File This process looks for a current transaction file each day. When a current file is found (data set not empty), the hash counts are verified and an appropriate action is taken based on the results (unequal hash counts produces an error message).

Transmit Daily Transaction File to Centers This process transmits the daily transaction file to each NASA center participating in the EE interface. The process repeats until all transmissions are successfully completed. Appropriate information messages are written to the NPPS batch log.

DAILY UPDATE OF EE TRANSACTIONS**FIGURE 2.2.2.1-1**

APPDLY.PPT

APPLICATION OF DAILY TRANSACTIONS

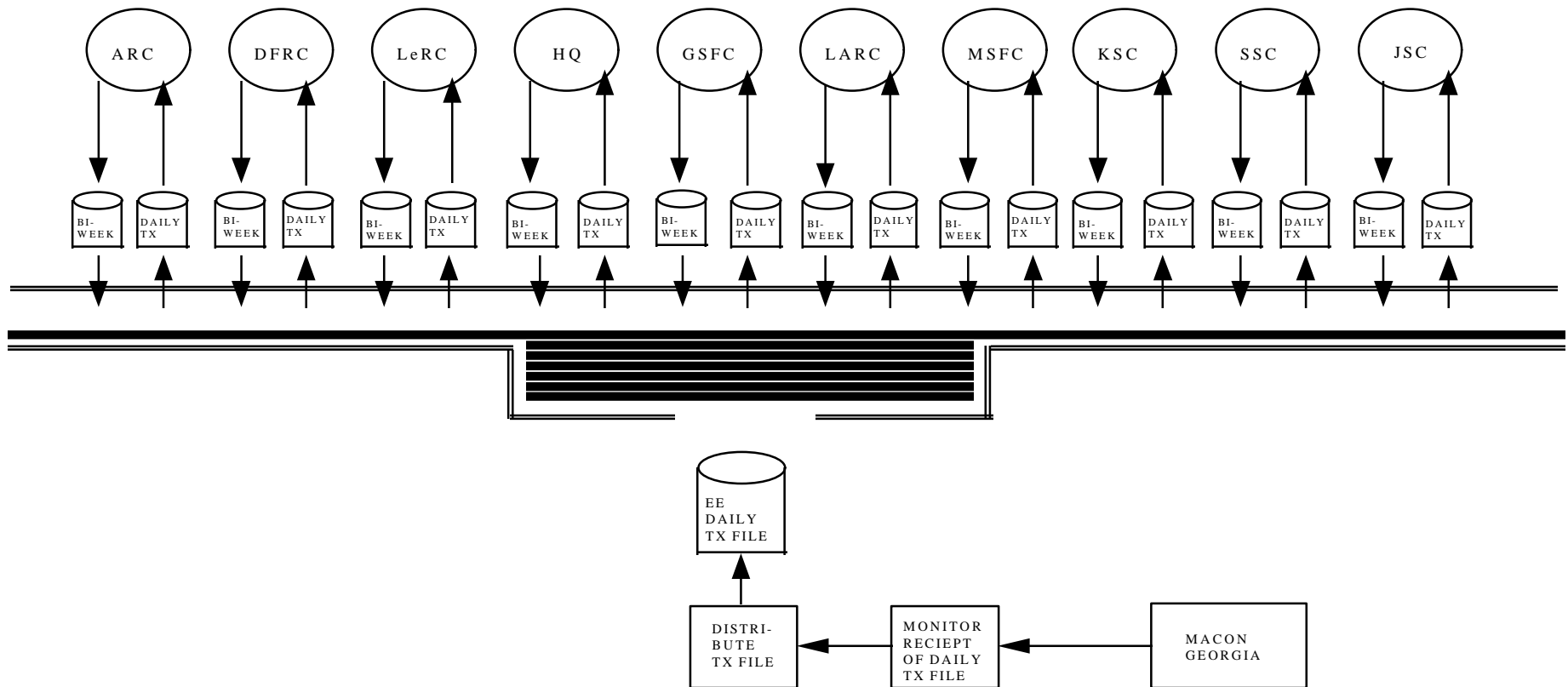


FIGURE 2.2.2-1

OVDLYTX2.PPT

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

2.3 NASA Transaction Edits/Employee Interface Requirements

The following edits and input field sizes are required for NASA EE transactions
(‘R’ = Required; ‘O’ = Optional):

ACTION: Home Address Changes for NASA (Input)

FIELD NAME	FIELD DESCRIPTION	GENE RATE	LEN GTH	R/O	A/N	EDITS
Street	First line of the address	User	35	O	A/N	
Street2	Second line of the address	User	35	R	A/N	Valid entry in 1st position
City	City	User	15	R	A/N	
State	State	User	2	R	A	Valid Postal Abbreviation
Zip Code	Zip Code	User	9	R5,O 4	A/N	Valid entry in first 5 positions; if valid entry in 6 position, then require 7-9

ACTION: Check Address for NASA (Input)

FIELD NAME	FIELD DESCRIPTION	GENE RATE	LEN GTH	R/O	A/N	EDITS
Street	First line of the address	User	35	O	A/N	
Street2	Second line of the address	User	35	R	A/N	Valid entry in 1st position
City	City	User	15	R	A/N	
State	State	User/ Macon	2	R	A	Valid Postal Abbreviation
Zip Code	Zip Code	User	9	R5,O 4	A/N	Valid entry in first 5 positions; if valid entry in 6 position, then require 7-9

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

ACTION: Federal Tax for NASA (input)

FIELD NAME	FIELD DESCRIPTION	GENERATE	LENGTH	R/O	A/N	EDITS
Marital Status	Denotes the marital status claimed	User	1	R	A	M = Married S = Single
Exemptions	Number of exemptions claimed	User	2	R	N	Values: 0-10
Deduction Amount	Amount of additional deductions to be withheld per pay period	User	3	O	N	\$\$\$

ACTION: State Tax for NASA (input)

FIELD NAME	FIELD DESCRIPTION	GENERATE	LENGTH	R/O	A/N	EDITS
Residence Code	State where taxes are paid (NPPS fills first two positions with state code)	User	2	R	A/N	Valid Postal Abbreviation
Marital Status	Married or Single	User	1	R/O *	A/N	'M' or 'S'
Exemptions	Number of exemptions claimed	User	2	R/O *	N	0 -10
Variances	Variable, depending on state (NPPS posts a minus sign in the first position if a negative deduction amount is contained in the employee record for CT state tax)	User	5			
Deduction Amount	Amount of additional deductions to be withheld per pay period	User	4.0 (signed)	O	N	\$\$\$\$

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

ACTION: Direct Deposit (Net Allotment) for NASA (input) *

FIELD NAME	FIELD DESCRIPTION	GENE RATE	LEN GTH	R/O	A/N	EDITS
Bank Routing Code	Identifies bank for direct deposit	User	9	R	N	Table from Treasury
Account Type	Identifies type of account	User	1	R	A/N	C = Checking S = Savings
Account Number	Identifies employee bank account	User	17	R	A/N	Can include blanks and dashes

*A STOP EFT transaction is rejected by the NASA processing of daily EE transactions. It can then be reviewed manually.

ACTION: Financial Allotment for NASA (input)

FIELD NAME	FIELD DESCRIPTION	GENE RATE	LEN GTH	R/O	A/N	EDITS
Bank Routing Code	Identifies bank for direct deposit	User	9	R	N	Table from Treasury
Account Type	Identifies type of account	User	1	R	A/N	C = Checking S = Savings
Account Number	Identifies employee bank account	User	17	R	A/N	Can include blanks and dashed
Deduction Amount	Amount to be deducted per pay period	User	5	R	N	\$\$\$\$\$

ACTION: FEHB Start, Change, Stop (input)

At this time the edits for these actions have been included in Appendix D, Data Cross Reference. As verification and further analysis they will be incorporated into this document.

ACTION: TSP Start, Change, Stop (input)

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

At this time the edits for these actions have been included in the attached DATAXREF.XLS. After verification and further analysis they will be incorporated into this document.

2.4 Reports

Refer to Appendix A, Reports for the Reports received in Employee Express.

2.5 NASA Tax Requirements

The table on the following pages has been extracted from an EE functional requirements specification. NASA state tax requirements have been inserted in the last column.

Legend:

Y = YES FIELD IS APPLICABLE TO STATE
N = NO FIELD IS NOT APPLICABLE TO STATE

Marrital Status

M = MARRIED
S = SINGLE
H = HEAD OF HOUSEHOLD

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

STATE	MARITAL STATUS	EXEMPTS	ADD'L W/H	OTHER (TO BE USED FOR UNIQUE STATE FILING REQUIREMENTS)	NASA RQMTS
AL - ALABAMA				NOT PARTICIPATING	
AK - ALASKA				NO STATE TAX	
AZ - ARIZONA	M/S	N	N	10%, 20%, 22%, 28%, 32% OF FEDERAL	ANY % M/S
AR - ARKANSAS	M/S/H	Y	Y		NOT REQUIRED
CA - CALIFORNIA	M/S/H	Y	Y	00-10 ESTIMATED DEDUCTION ALLOWANCES BASED ON ITEMIZED DEDUCTIONS	0-99 ST EXMPTNS M/ S/ H
CO - COLORADO	N	N	Y		DO NOT REQUIRE = FED, MARITAL OR EXMTNS
CT - CONNECTICUT	A/B/C/D	N	Y	A = SINGLE; MARRIED FILING SEPARATELY; MARRIED FILING JOINTLY WITH COMBINED INCOME LESS THAN \$100,500 B = HEAD OF HOUSEHOLD C = MARRIED FILING JOINTLY & SPOUSE DOES NOT WORK D = MARRIED FILING JOINTLY & COMBINED INCOME IS MORE THAN \$100,500	A/ B/ C/ D ALLOW EXEMPT FROM STATE TAX
DE - DELAWARE	M/S	Y	Y		NOT REQUIRED
DC - DIST OF COLUMBIA	M/S/H/N	Y	N		M/ S
FL - FLORIDA					NO STATE TAX

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

STATE	MARITAL STATUS	EXEMPTS	ADD'L W/H	OTHER (TO BE USED FOR UNIQUE STATE FILING REQUIREMENTS)	NASA RQMTS
GA - GEORGIA	M/S/H	Y	Y	VARIANCE = N	NOT REQUIRED
HI - HAWAII	M/S	Y	Y		NOT REQUIRED
ID - IDAHO	M/S	Y	Y		NOT REQUIRED
IL - ILLINOIS	NONE	Y	Y		NOT REQUIRED
IN - INDIANA	Y	Y	Y		NOT REQUIRED
IA - IOWA	M/S	Y	Y		NOT REQUIRED
KS - KANSAS					NOT REQUIRED
KY - KENTUCKY	NONE	Y	Y		NOT REQUIRED
LA - LOUISIANA	M/S/0	Y	Y	VARIANCE = Y	M/S (VARIANCE, # DEPENDENTS INCLUDED IN EXEMPTIONS)
ME - MAINE	M/S	Y	Y		NOT REQUIRED
MD - MARYLAND	NONE	Y	Y	COUNTY	COUNTY W/H % IN ALTERNATE % (NO COUNTY CODE)
MA - MASSACHUSETTS	NONE	Y	Y		NOT REQUIRED
MI - MICHIGAN	NONE	Y	Y		NOT REQUIRED
MN - MINNESOTA	M/S	Y	Y		NOT REQUIRED

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

STATE	MARITAL STATUS	EXEMPTS	ADD'L W/H	OTHER (TO BE USED FOR UNIQUE STATE FILING REQUIREMENTS)	NASA RQMTS
MS - MISSISSIPPI				NOT PARTICIPATING	
MO - MISSOURI				NOT PARTICIPATING	
MT - MONTANA	M/S	Y	Y		NOT REQUIRED
NE - NEBRASKA				SAME AS FEDERAL	NOT REQUIRED
NV - NEVADA					NO STATE TAX
NH - NEW HAMPSHIRE					NO STATE TAX
NJ - NEW JERSEY	M/S/N/H/T	Y	Y	A, B, C, D, E	NOT REQUIRED
NM - NEW MEXICO				SAME AS FEDERAL	ACCEPT STATE MARITAL (M/ S) AND EXEMPTIONS
NY - NEW YORK	M/S	Y	Y		M, S
NC - N. CAROLINA	M/S/H	Y	Y		M/ S/ H
ND - N. DAKOTA				SAME AS FEDERAL	NOT REQUIRED
OH - OHIO	NONE	Y	Y		
OK - OKLAHOMA				% OF GROSS	NOT REQUIRED
OR - OREGON	M/S/Z/H	Y	Y		NOT REQUIRED
PA - PENNSYLVANIA				% OF GROSS (FIXED)	ACCEPT ADDITIONAL W/H
RI - RHODE ISLAND				% OF FEDERAL (FIXED)	NOT REQUIRED
SC - S. CAROLINA		Y	Y		NOT REQUIRED

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

STATE	MARITAL STATUS	EXEMPTS	ADD'L W/H	OTHER (TO BE USED FOR UNIQUE STATE FILING REQUIREMENTS)	NASA RQMTS
SD - S. DAKOTA					NO STATE TAX
TN - TENNESSEE					NO STATE TAX
TX - TEXAS					NO STATE TAX
UT - UTAH				% OF FEDERAL	ACCEPT STATE EXEMPTIONS, MARITAL STATUS AND ADD W/H NOT SAME AS FEDERAL
VT - VERMONT				SAME AS FEDERAL	NOT REQUIRED
VA - VIRGINIA	NONE	Y	Y		
WA - WASHINGTON					NO STATE TAX
WV - W. VIRGINIA	NONE	Y	Y		
WT - WISCONSIN		Y	Y		NOT REQUIRED
WY - WYOMING					NO STATE TAX

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

APPENDIX A REPORTS

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

1.0 Transaction report layout of transactions received from OPM.

EEB001 EMPLOYEE EXPRESS TRANSACTION REPORT

PURPOSE: To provide a transaction report of transactions coming from OPM.

CONTENT: Transaction report of all transactions from OPM.

SEQUENCE: By Social Security Number

EEB001 SUBJECT TO PRIVACY ACT OF 1974
NASA PERSONNEL AND PAYROLL SYSTEM PAGE:
INSTALLATION NAME DATE:
EMPLOYEE EXPRESS TRANSACTION REPORT TIME:

TRANS	SSN	EFFDATE	AGENCY	RT	NCHKPK	KIOSK
DATE TIME						
AAAABBBBBBBBBB	CCCCCDDDD	EE	FFF	G	HHHHIIIIII	JJJJJ
KKKKKKK	LLLLLL	MMMM				

- A. Transaction code
- B. Social Security Number
- C. Effective Date
- D. Agency ID
- E. Routing Code
- F. Name Check
- G. Phone/Kiosk Indicator
- H. Kiosk Number
- I. Date of Action
- J. Time of Action
- K. Vary depending on OPM transaction code.
- L. Vary depending on OPM transaction code.
- M. Vary depending on OPM transaction code.

APPENDIX B

DATA CROSS REFERENCE

NASA - NPPS EMPLOYEE EXPRESS INTERFACE CONTROL DOCUMENT

10/15/96 RLSE 5.2.1

1.0 Refer to separate document NPPS Employee Express ICD Data Cross Reference.